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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/615,002

07/08/2003

Kevin Barry Ray

58575-281049

8143

7590

03/02/2005

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EXAMINER
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FUNK, STEPHEN R

ART UNIT	PAPER NUMBER
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2854

DATE MAILED: 03/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	10/615,002	RAY ET AL.	
	Examiner	Art Unit	
	Stephen R. Funk	2854	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 27 December 2004.
- 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 67-102 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 101 and 102 is/are allowed.
- 6) ☒ Claim(s) 67-100 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

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The disclosure is objected to because of the following informalities: On pages 7 and 8 of applicant's amendment filed August 13, 2004 there are two different amendments to page 14 line 1 in the specification. Since amendments to the specification under IFW are not entered until allowance it is not apparent which replacement paragraph will actually be entered on page 14 line 1. It is suggested that applicant resubmit the proper amendment to page 14 line 1 to ensure that the specification is printed properly if any patent shall issued from this application. Appropriate correction is required.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 67 - 69, 71 - 73, 77, and 86 are rejected under 35 U.S.C. 103(a) as being unpatentable over Agfa (UK 1,431,462) in view of Graulich et al. (US 2,984,588).

Agfa teaches providing a printing plate precursor (page 2 lines 8 - 17) comprising a substrate (page 4 lines 47 and 90) and a negative working oleophilic image layer comprising at

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least one polymeric material (page 2 lines 109 - 125, page 3 line 126 - page 4 line 17), imagewise contacting the image forming layer with an acid catalyst (page 3 lines 19 - 34, page 3 line 126 - page 4 line 17), and thermally treating the image forming layer (page 3 lines 48 - 53) so the polymer undergoes sufficient crosslinking (page 2 lines 109 - 115, page 4 lines 2 - 5) to cause the imagewise contacted portions to become less developable in a developer liquid (page 1 line 89 - page 2 line 7). Note that Agfa teaches on page 2 line 16 that the plate precursor may be offset, i.e. planographic or lithographic. Agfa does not specifically teach the polymeric material being a hydroxyl, vinyl, acrylate, or methacrylate moiety.

Agfa refers to Graulich et al. on page 4 lines 15 - 17 for further polymers. Graulich et al. teach providing the image forming layer with phenols (e.g. a hydroxyl). See column 3 lines 19 - 34. It would have been obvious to one of ordinary skill in the art to provide the method of Agfa with a polymeric binder comprising a hydroxyl phenol as taught by Graulich et al. in view of the specific teaching by Agfa to utilize the polymers disclosed by Graulich et al.

With respect to claim 68 see page 3 lines 39 - 53 of Agfa.

With respect to claim 69 see again column 3 lines 19 - 34 of Graulich et al.

With respect to claims 71 - 73 see again page 2 lines 109 - 115 of Agfa and column 3 lines 19 - 34 of Graulich et al.

With respect to claim 77 see page 1 line 89 - page 2 line 7 of Agfa.

With respect to claim 86 the step of contacting the developer is the same as applying the "solvent" on page 1 line 89 - page 2 line 7.

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Claims 69 - 80 and 87 - 90 are rejected under 35 U.S.C. 103(a) as being unpatentable over Agfa in view of Graulich et al. as applied to the claims above, and further in view of Damme et al. ('838).

Agfa does not teach the image forming layer being a novolak or resole resin.

With respect to claims 69 - 76 Damme et al. teach the phenolic image forming layer being novolak and/or resole resins. See paragraphs 80 - 85 of Damme et al., in particular, paragraphs 82 and 85. It would have been obvious to one of ordinary skill in the art to provide the method of Agfa, as modified by Graulich et al., with novolak and/or resole resins in view of Damme et al. teaching the particular types of phenolic resins.

With further respect to claims 72 and 73 note again the thermal treatment of Agfa.

With respect to claims 77 - 80 Agfa does not teach the specifics of the catalyst mixture. However, see paragraphs 56 - 59 of Damme et al. It would have been obvious to one of ordinary skill in the art to provide the method of Agfa, as modified by Graulich et al., with a catalyst and carrier having the recited properties in view of Damme et al. so as to more easily jet the drops to the image forming layer.

With respect to claims 87 - 90 Agfa does not teach the specifics of the developer. Damme et al. teach the developer as recited in paragraph 103. It would have been obvious to one of ordinary skill in the art to provide the method of Agfa, as modified by Graulich et al., with an alkaline developer in view of Damme et al. so as to more readily remove the non-image areas of the image forming layer.

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Claims 81 - 85, 91, and 96 - 100 are rejected under 35 U.S.C. 103(a) as being unpatentable over Agfa in view of Graulich et al. as applied to claims 67 - 69, 71 - 73, 77, and 86 above, and further in view of Deutsch et al. ('618).

With respect to claims 81 - 85 Agfa does not teach the specific heating and drying steps. Deutsch et al. teach the heating and drying steps as recited. See column 9 lines 48 - 65 and column 8 lines 14 - 15 of Deutsch et al. It would have been obvious to one of ordinary skill in the art to provide the method of Agfa, as modified by Graulich et al., with the steps of heating and drying the image forming layer so as to thoroughly complete the crosslinking reaction.

With respect to claims 91 and 96 - 100 Agfa does not teach the composition of the developer. Deutsch et al. teach the developer as recited in column 10 lines 37 - 60. It would have been obvious to one of ordinary skill in the art to provide the method of Agfa, as modified by Graulich et al., with the developer of Deutsch et al. so as to provide the desired alkalinity and solvating capability.

Claims 92 - 95 are rejected under 35 U.S.C. 103(a) as being unpatentable over Agfa in view of Graulich et al. and Deutsch et al. as applied to the claims above, and further in view of Akiyama et al. ('724).

Agfa and Deutsch et al. do not teach the ratio between the silicon oxide and metal oxide. See column 10 lines 37 - 45 of Deutsch et al. Akiyama et al. teach the ratio as recited. See column 22 line 12+ of Akiyama et al. It would have been obvious to one of ordinary skill in the art to provide the method of Agfa, as modified by Graulich et al. and Deutsch et al., with the recited silicon oxide to metal oxide ratio in view of Akiyama et al. so as to sufficiently adjust the pH of the developer.

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Claims 101 and 102 are allowed.

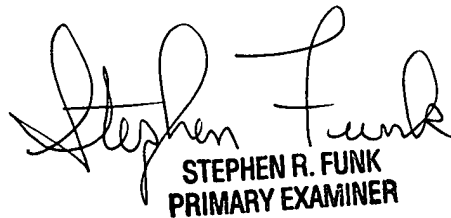
Applicant's arguments with respect to claim 67 have been considered but are moot in view of the new ground(s) of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen R. Funk whose telephone number is (571) 272-2164.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Drew Hirshfeld, can be reached at (571) 272-2168.

The fax phone number for ALL official papers is (703) 872-9306. Upon consulting with the examiner *unofficial* papers only may be faxed directly to the examiner at (571) 273-2164.

SRF  
February 28, 2005

  
STEPHEN R. FUNK  
PRIMARY EXAMINER